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09/981,556	10/17/2001	Arnold G. Slezak	P1535US01	6786

7590

09/30/2004

Fellers, Snider, et al

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EXAMINER

TUGBANG, ANTHONY D

ART UNIT

PAPER NUMBER

3729

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/981,556

**Applicant(s)**

SLEZAK, ARNOLD G.

**Examiner**

A. Dexter Tugbang

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 10-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. The applicant's amendment filed on 6/18/04 has been fully considered and made of record.

### *Election/Restrictions*

2. The applicant's amendment filed on 6/18/04 has necessitated a new restriction requirement as follows.

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-9, drawn to a process of aligning discs, classified in class 29, subclass 603.03.

II. Claims 10-20, drawn to a product of a disc drive, classified in class 360, subclass 98.08.

The inventions are distinct, each from the other because of the following reasons:

4. Inventions of Groups I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product of Group II can be made by a materially different method, such as one that has a completely different chronological order of steps as compared with Group I. For example in Group II, the final structure of the disc drive can be such that the servo pattern information is written on the disc after the disc is biased against the motor hub.

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5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. Amended Claims 10-20 are directed to an invention that is independent or distinct from the invention originally claimed for the reasons set forth above.

NOTE: It is noted that the scope of each of Claims 9 and 20 have clearly been changed such that Claim 9 is now a method claim belonging to, or being rejoined with, Group I. Claim 20 is now a product claim belonging to Group II.

Since applicant has received an action on the merits for the originally presented invention (Group I of at least Claims 1-8), this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, Claims 10-20 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

7. Applicant's election with traverse of the invention of Group I in the reply filed on 6/18/04 is acknowledged. The traversal is on the ground(s) that because Group II has been amended to be product-by-product claims, that the product has to be made by that method. This is not found persuasive because the final structure in the product of Group II is not limited to the method of Group I, but can be made by a materially different method (as stated in the example above) where the final structure of Group II is what determines patentability. See MPEP § 2113.

The requirement is still deemed proper and is therefore made FINAL.

***Claim Objections***

8. Claims 2 and 7-9 are objected to because of the following informalities.

In Claim 2, the recitation of "obtaining a disc step"(line 2) should be replaced with -- placing the disc step--.

The same problems with Claim 2 above also occur in each of Claims 7-9.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In Claim 9, the phrase of "a second indicia different than the first indicia on the other side of the disc" (lines 3-4) is new matter. The specification and drawings, as originally filed, does not provide support for the second indicia being "on the other side of the disc" relative to the first indicia. For example, in applicant's Figures 1 and 2, the multiple indicia marks 134 are shown to be *on the same side*, or same surface, of the disc. Nowhere is it shown or discussed that the marks 134 are on different sides or different surfaces of the disc.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

12. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 9, it is unclear from the disclosure what is meant by the recitation of “on the other side of the disc” (lines 3-4) as this refers to the relationship of the first and second indicia.

***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1-5, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuroba et al 6,081,990.

Kuroba discloses a method comprising: placing a disc 20 comprising servo pattern information in relation to an angular references axis (reference mark 22) around a motor hub (spindle 21) thereby biasing the disc against the motor hub in relation to the angular reference axis (see various embodiments of Figures 1a, 4, 7a, 7b, 8a and 8c). The term “biasing” is read as the effect of balancing the disc, or movement of the disc, necessary for balancing the discs on the hub during assembly of the disc drive (see col. 8, lines 31+).

Regarding Claim(s) 2 and 7, Kuroba further teaches that the disc contains prewritten servo pattern information on it in relation to a radially disposed reference axis (see col. 1, lines

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10-12). The reference mark 22 is read as the “radially disposed reference axis” since it located on the radial inner surface of the disc, or can be alternatively read as “indicia”

Regarding Claim(s) 3 and 4, Kuroba further teaches that biasing includes pressingly engaging the disc against the motor hub in a direction along the reference axis 22 (see Figures 1a or 8c) and obtaining a second disc having servo pattern information and a second angular reference axis (another mark 22), where both the first and second disc are placed, biased or balanced against the motor hub (see Figure 8c).

Regarding Claim(s) 5, because Kuroba teaches first and second discs that are biased, the biasing or balancing forces for each disc has “different directions” because each disc can have more than one reference axis (marks 22) where each balancing force is applied at each reference axis (mark 22).

Regarding Claim(s) 9, Kuroba further teaches that the angular reference axis can comprise of a first indicia and a second indicia (see col. 6, lines 65+), i.e. more than one reference mark 22, in which the second indicia is different from the first indicia because each are at different locations. As best understood, the first and second indicia of Kuroba can be said to be on different sides of the disc to the same extent that the applicant’s first and second indicia are on different sides of the disc.

### ***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al.

Kuroda discloses the claimed manufacturing method as relied upon above, further including that the first and second discs are biased with a balancing force from different directions or angles (see col. 8, lines 31+). Kuroda does not necessarily mention that the first and second disc can each be biased in “substantially opposite directions”. However, to bias or balance the first and second disc from an opposite direction is considered to be an effective variable within the level of ordinary skill in the art of assembling discs onto a motor hub. To bias the first and second discs from different directions, including “substantially opposite directions”, are necessary to balance the discs on the motor hub for proper operation of the disc drive or disc assembly.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Kuroda by biasing the first and second discs from substantially opposite directions, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kuroda by biasing the first and second discs from substantially opposite directions to achieve proper operation of the disc drive.

17. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al in view of Japanese Patent Publication, JP 5-205442, referred to hereinafter as JP’442.

Kuroda discloses the claimed manufacturing method as relied upon above in Claim 1. Kuroda does not mention that the angular reference axis includes a laser index mark.



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JP'442 teaches that an angular reference axis (inner surface of discs) can include a laser index mark 12 to advantageously have quality information on the disc itself (see PURPOSE).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the angular reference axis of Kuroda by including the laser index mark, as taught by JP'442, to positively provide quality information in the disc itself.

### *Response to Arguments*

18. Applicant's arguments with respect to Claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 703-308-7599.

The examiner can normally be reached on Monday - Friday 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**A. Dexter Tugbang**  
**Primary Examiner**  
**Art Unit 3729**

September 28, 2004